Data Validation Checklist
Semivolatile Organic Analyses

Project:	35TH Avenue Superfund Site	Project No:	60430028; 1
Laboratory:	TestAmerica – Savannah, GA	Job ID.:	680-106200-1
Method:	SW-846 8270D Low-Level (PAH)	Associated Samples:	Refer to **Attachment A** (Sample Summary)
Matrix:	Soil	Samples Collected:	10/08/2014 & 10/09/2014
Reviewer:	Karen M Trujillo, URS Group, Inc.	Date:	08/07/2015
Concurrence[1]:	Martha Meyers-Lee, URS Group, Inc.	Date:	08/07/2015

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1. Were sample storage and preservation requirements met? If temperature >6°C, then J/UJ flag results.	✓				
2. Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3. Were there any problems noted in laboratory data package concerning condition of samples upon receipt?		✓			
4. Do any soil samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5. Were holding times met (≤7 and 14 days from collection to extraction for aqueous and solid samples, respectively; ≤40 days from extraction to analysis)? If not, then J/UJ flag sample results. If grossly (2x) exceeded, then flag J/R.	✓				
6. Were results for all project-specified target analytes reported?	✓				
7. Were project-specified Reporting Limits achieved for undiluted sample analyses?	✓				
8. Were samples with analyte concentrations exceeding the calibration range of the instrument re-analyzed at a higher dilution? If not, then J flag sample result.	✓				
9. Was a method blank extracted with each batch (i.e., one per 20 samples, per batch, per matrix and per level)?	✓				
10. Were target analytes detected in the method blank?		✓			
11. Are equipment/rinsate blanks associated with every sample? If no, note in DV report.		✓		According to the QAPP, a rinsate blank is to be collected after each decontamination event, which occurs once per week per the client. A rinsate blank is not associated with this sampling event. Blank contamination will be evaluated based on method blank results.	
12. Were target analytes detected in equipment/rinsate blanks?			✓		
13. Were analytes detected in samples below the blank contamination action level? If yes, U flag positive sample results <5x associated blank concentration (10x for common blank contaminants–phthalates)			✓	Blank contamination does not exist.	

[1] Independent technical reviewer

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
14. Is a field duplicate associated with this Job?	✓			CV0005Y-CSD6 (680-106200-2) is a field duplicate of sample CV0005Y-CS6 (680-106200-1).	
15. Was precision deemed acceptable as defined by the project plans?		✓		Refer to **Attachment B** (Field Duplicate Evaluation)	J
16. Were DFTPP ion abundance criteria (i.e., Table 3 of SW-846 8270D) met? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓			Alternate tuning criteria were used by the laboratory (i.e., EPA Method 525.2). All ion abundance criteria were met per EPA Method 525.2.	
17. Were samples analyzed within 12 hours of the DFTPP tune? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓				
18. Were initial and continuing calibration standards analyzed at the proper frequency for each instrument? • Ensure that a minimum of five standards are used for the initial calibration. If no, use professional judgment to determine the effect on the data and note in the reviewer narrative. • An initial calibration is to be associated with each sample analysis. • A continuing calibration standard is to be analyzed for every 12 hours of sample analysis per instrument.	✓			• Instrument ID: CMSY • Initial Calibration: 10/07/2014 • ICV: 10/07/14 @ 16:25 • CCV: 10/15/14 @ 13:05 & 10/16/2014 @09:29	
19. Were calibration results within laboratory/project specifications? • ICAL (Criteria: $\leq$20 mean %RSD ($\leq$50% for poor performers), OR r$\geq$0.995, OR $r^2 \geq 0.99$, and RRF $\geq$0.050 ($\geq$0.010 for poor performers)): o If %RSD>20 (>50% for poor performers), or r <0.995, or r^2 <0.995, then J flag positive results and UJ flag non-detects o If mean RRF <0.050 (<0.010 for poor performers), then J flag positive results and R flag non-detects (unless the lab analyzed a detectability check standard) • ICV and CCV (ICV Criteria: $\leq \pm$30%D; CCV Criteria: $\leq \pm$20%D ($\leq$50% for poor performers) and RF $\geq$0.050 ($\geq$0.010 for poor performers)): o If %D> Control Limit (>50% for poor performers), then J flag positive results and UJ flag non-detects o If RF <0.050 (<0.010 for poor performers), then UJ flag non-detected semivolatile target compounds	✓				
20. Was a LCS prepared for each batch and matrix?	✓				
21. Were LCS recoveries within lab control limits? If no, J flag positive results when %R >Upper Control Limit (UCL) and J/R flag results when %R <Lower Control Limit (LCL).	✓				
22. Were LCS/LCSD RPD within lab specifications? If no, J flag positive results and UJ flag non-detects			✓	LCS only	
23. Was a MS/MSD pair extracted at the proper frequency (one per 20 samples per batch)?	✓				
24. Is the MS/MSD parent sample a project-specific sample?	✓			Batch 353328: 680-106200-1 (CV0005Y-CS6), MS/MSD	

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
25. For all analytes with native sample concentrations < 4 x spiking level, were MS and MSD recoveries within laboratory/project specifications? *Only QC results for project samples that are reported under this Job ID are evaluated.* • If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. • If either MS or MSD recovery meets control limits, qualification of data is not warranted. • MS and MSD %R<10: J and R Flag positive and ND results, respectively • MS and MSD %R >10 and <LCL: J Flag positive and UJ flag non-detect results • MS and MSD R% >UCL (or 140): J Flag positive results		✓		680-106200-1 (CV0005Y-CS6): • Benzo[a]anthracene MS and MSD @18 and 32 %R (Lab/Project: 39-157) • Fluoranthene MS and MSD @-25 and -11 %R (Lab/Project: 36-147) • Phenanthrene MS and MSD @25 and 13 %R (Lab/Project: 40-135%R) • Pyrene MS and MSD @-40 and -13 %R (Lab/Project: 38-145%R) Results for the above-mentioned analytes are estimated (J-flagged) in sample CV0005Y-CS6 and field duplicate CV0005Y-CSD6 (680-106200-2) due to matrix interference. Qualification of CV0005Y-CS6 data is not warranted for the following analytes, as the MSD recovery met control limits: • Benzo[a]pyrene MS and MSD @28 and 45 %R (Lab/Project: 41-158) • Benzo[b]fluoranthene MS and MSD @-9 and 56 %R (Lab/Project: 35-152) • Chrysene MS and MSD @6 and 39 %R (Lab/Project: 38-147)	J
26. For all analytes with native sample concentrations < 4 x spiking level, were laboratory criteria met for precision during the MS and MSD analyses? *Only QC results for project samples that are reported under this Job ID are evaluated.* • If the native sample concentration > 4x spiking level, then an evaluation of interference is not possible. • If %RPD > UCL, J flag positive result and UJ flag non-detect result	✓				
27. Were surrogate recoveries within lab/project specifications? • If %R for 1 Acid or BN surrogates <10, then J flag positive and R flag non-detect associated sample results (i.e., acid or BN results) • If 2 or more Acid or BN %R >UCL, then J flag positive associated sample results (i.e., acid or BN results) • If 2 or more Acid or BN %R ≥10%, but <LCL, then J flag positive and UJ flag non-detect associated sample results (i.e., acid or BN results) • If 2 or more Acid or BN , with 1 %R >UCL and 1 %R ≥10%, but <LCL, then J flag positive and UJ flag non-detect associated sample results (i.e., acid or BN results)		✓		Surrogate o-terphenyl was not recovered (0%) during the diluted analysis of all samples. Qualification of sample results is not warranted, as the surrogate compound was diluted out of the samples.	
28. Were internal standard (IS) results within lab/project specifications? • If IS area counts are less than 50% of the midpoint calibration standard, then J flag positive and UJ flag non-detect associated	✓				

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
sample results • If IS area counts are greater than 100% of the midpoint calibration standard, then J flag positive results • If extremely low area counts are reported or performance exhibits a major abrupt drop-off, then a severe loss of sensitivity is indicated, J flag positive and R flag non-detect results • If retention time of sample's internal standard is not within 30 seconds of the associated calibration standard, R flag associated data. • The chromatographic profile for that sample must be examined to determine if any false positives or negatives exists. For shifts of large magnitude, the reviewer may consider partial or total rejection of the data for that sample fraction. Positive results need not be qualified as R, if mass spectral criteria are met.					
29. Were lab comments included in report?	✓			Refer to **Attachment C** (Case Narrative)	
Comments: The data validation was conducted in accordance with the *Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1* (OTIE, October 2012). The data review process was modeled after the *USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Methods Data Review* (EPA, October 1999) and *USEPA CLP NFG for Low Concentration Organic Methods Data Review* (EPA, June 2001). Sample results have been qualified based on the results of the data review process (**Attachment D**). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment.					

DV Flag Definitions:

J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
R The sample results are unusable. The analyte may or may not be present in the sample.
U The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
UJ The analyte was not detected above the limit, and the limit is approximate and may be inaccurate or imprecise.

ATTACHMENT A

SAMPLE SUMMARY

SAMPLE SUMMARY

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-106200-1
Sdg Number: 680-106200-01

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-106200-1	CV0005Y-CS6	Solid	10/09/2014 0900	10/11/2014 0933
680-106200-1MS	CV0005Y-CS6	Solid	10/09/2014 0900	10/11/2014 0933
680-106200-1MSD	CV0005Y-CS6	Solid	10/09/2014 0900	10/11/2014 0933
680-106200-2	CV0005Y-CSD6	Solid	10/09/2014 0900	10/11/2014 0933
680-106200-3	CV0005Y-CS12	Solid	10/09/2014 0910	10/11/2014 0933
680-106200-4	CV0005Y-CS18	Solid	10/09/2014 0920	10/11/2014 0933
680-106200-5	CV0005Y-CS24	Solid	10/09/2014 0930	10/11/2014 0933
680-106200-6	CV0005AA-CS6	Solid	10/08/2014 1400	10/11/2014 0933
680-106200-7	CV0005AA-CS12	Solid	10/08/2014 1410	10/11/2014 0933
680-106200-8	CV0005AA-CS18	Solid	10/08/2014 1420	10/11/2014 0933
680-106200-9	CV0005AA-CS24	Solid	10/08/2014 1430	10/11/2014 0933
680-106200-10	CV0005BB-CS6	Solid	10/08/2014 1230	10/11/2014 0933
680-106200-11	CV0005BB-CS12	Solid	10/08/2014 1240	10/11/2014 0933
680-106200-12	CV0005BB-CS18	Solid	10/08/2014 1250	10/11/2014 0933
680-106200-13	CV0005BB-CS24	Solid	10/08/2014 1300	10/11/2014 0933
680-106200-14	CV0005E-CS6	Solid	10/08/2014 0920	10/11/2014 0933
680-106200-15	CV0005E-CS12	Solid	10/08/2014 0930	10/11/2014 0933
680-106200-16	CV0005E-CS18	Solid	10/08/2014 0940	10/11/2014 0933
680-106200-17	CV0005E-CS24	Solid	10/08/2014 0950	10/11/2014 0933

ATTACHMENT B

FIELD DUPLICATE EVALUATION

Evaluation of Field Duplicate Results **Attachment B**

Analyte	CV0005Y-CS6 680-106200-1	RL	CV0005Y-CSD6 680-106200-2	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action
1-Methylnaphthalene	190	150	230	150	µg/kg	750	NA	**40**	**300**	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	210	150	240	150	µg/kg	750	NA	**30**	**300**	None, absolute difference ≤ 2x Avg RL
Anthracene	160	150	U	150	µg/kg	750	NA	**160**	**300**	None, absolute difference ≤ 2x Avg RL
Benzo(a)anthracene	650	150	350	150	µg/kg	750	NA	**300**	**300**	None, absolute difference ≤ 2x Avg RL
Benzo(a)pyrene	630	150	400	150	µg/kg	750	NA	**230**	**300**	None, absolute difference ≤ 2x Avg RL
Benzo(b)fluoranthene	990	150	670	150	µg/kg	750	NA	**320**	**300**	**J/UJ-flag, absolute difference > 2x Avg RL**
Benzo(g,h,i)perylene	430	150	290	150	µg/kg	750	NA	**140**	**300**	None, absolute difference ≤ 2x Avg RL
Benzo(k)fluoranthene	430	150	260	150	µg/kg	750	NA	**170**	**300**	None, absolute difference ≤ 2x Avg RL
Chrysene	860	150	520	150	µg/kg	750	NA	**340**	**300**	**J/UJ-flag, absolute difference > 2x Avg RL**
Dibenzo(a,h)anthracene	210	150	150	150	µg/kg	750	NA	**60**	**300**	None, absolute difference ≤ 2x Avg RL
Fluoranthene	1200	150	610	150	µg/kg	750	NA	**590**	**300**	**J/UJ-flag, absolute difference > 2x Avg RL**
Indeno(1,2,3-cd)pyrene	350	150	240	150	µg/kg	750	NA	**110**	**300**	None, absolute difference ≤ 2x Avg RL
Naphthalene	140 J	150	160	150	µg/kg	750	NA	**20**	**300**	None, absolute difference ≤ 2x Avg RL
Phenanthrene	810	150	470	150	µg/kg	750	NA	**340**	**300**	**J/UJ-flag, absolute difference > 2x Avg RL**
Pyrene	1200	150	620	150	µg/kg	750	NA	**580**	**300**	**J/UJ-flag, absolute difference > 2x Avg RL**

Note: If the analyte was not detected, then the cell was left blank.

µg/kg - micrograms per kilogram
J - Estimated value
NA - Not applicable
RL - Reporting limit
RPD - Relative percent difference
U - Not detected at the associated limit
UJ - Not detected and the limit is estimated

Precision is based on either the absolute difference between sample results or RPD. If the sample results are less than or equal to 5x's the RL, then precision is based on the absolute difference between duplicate results. If sample results >5x's RL, then precision is evaluated using RPD. J-Flag sample results whenever the absolute difference is greater than the RL (2x for soils) or the RPD >20% (50% for soil). Table above presents the results for detected analytes only.

ATTACHMENT C

CASE NARRATIVE

CASE NARRATIVE
Client: Oneida Total Integrated Enterprises LLC
Project: 35th Avenue Superfund Site
Report Number: 680-106200-1

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In the event of interference or analytes present at high concentrations, samples may be diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

No additional analytical or quality issues were noted, other than those described below or in the Definitions/Glossary page.

RECEIPT

The samples were received on 10/11/2014 9:33 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperatures of the 4 coolers at receipt time were 0.8º C, 1.8º C, 4.8º C and 5.2º C.

SEMIVOLATILE ORGANIC COMPOUNDS (GC/MS) LOW LEVEL PAH

Samples CV0005Y-CS6 (680-106200-1), CV0005Y-CSD6 (680-106200-2), CV0005Y-CS12 (680-106200-3), CV0005Y-CS18 (680-106200-4), CV0005Y-CS24 (680-106200-5), CV0005AA-CS6 (680-106200-6), CV0005AA-CS12 (680-106200-7), CV0005AA-CS18 (680-106200-8), CV0005AA-CS24 (680-106200-9), CV0005BB-CS6 (680-106200-10), CV0005BB-CS12 (680-106200-11), CV0005BB-CS18 (680-106200-12), CV0005BB-CS24 (680-106200-13), CV0005E-CS6 (680-106200-14), CV0005E-CS12 (680-106200-15), CV0005E-CS18 (680-106200-16) and CV0005E-CS24 (680-106200-17) were analyzed for Semivolatile Organic Compounds (GC/MS) Low level PAH in accordance with EPA SW846 Method 8270D.

Method(s) 8270D_LL_PAH: Manual integration was performed on the following sample(s): CV0005AA-CS12 (680-106200-7), CV0005AA-CS18 (680-106200-8), CV0005AA-CS6 (680-106200-6), CV0005BB-CS12 (680-106200-11), CV0005BB-CS18 (680-106200-12), CV0005BB-CS24 (680-106200-13), CV0005BB-CS6 (680-106200-10), CV0005E-CS12 (680-106200-15), CV0005E-CS24 (680-106200-17), CV0005E-CS6 (680-106200-14), CV0005Y-CS6 (680-106200-1), CV0005Y-CSD6 (680-106200-2), CV0005E-CS18 (680-106200-16).

Method(s) 8270D_LL_PAH: The following sample(s) was diluted due to abundance of target analytes: CV0005Y-CS6 (680-106200-1 MS), CV0005Y-CS6 (680-106200-1 MSD). As such, surrogate and MS/MSD spike recoveries were diluted out and are not reported.

Method(s) 8270D_LL_PAH: The following sample(s) required a dilution due to the nature of the sample matrix: CV0005AA-CS24 (680-106200-9), CV0005Y-CS12 (680-106200-3), CV0005Y-CS18 (680-106200-4), CV0005Y-CS24 (680-106200-5). Because of this dilution, the surrogate spikes are not reported.

Method(s) 8270D_LL_PAH: The following sample(s) was diluted due to the nature of the sample matrix: CV0005AA-CS24 (680-106200-9), CV0005Y-CS18 (680-106200-4). Elevated reporting limits (RLs) are provided.

Several analytes have recovery outside criteria low for the MS and MSD of sample CV0005Y-CS6 (680-106200-1) in batch 680-353689. Refer to the QC report for details.

METALS (ICP)

Samples CV0005Y-CS6 (680-106200-1), CV0005Y-CSD6 (680-106200-2), CV0005Y-CS12 (680-106200-3), CV0005Y-CS18 (680-106200-4), CV0005Y-CS24 (680-106200-5), CV0005AA-CS6 (680-106200-6), CV0005AA-CS12 (680-106200-7), CV0005AA-CS18 (680-106200-8), CV0005AA-CS24 (680-106200-9), CV0005BB-CS6 (680-106200-10), CV0005BB-CS12 (680-106200-11), CV0005BB-CS18 (680-106200-12), CV0005BB-CS24 (680-106200-13), CV0005E-CS6 (680-106200-14), CV0005E-CS12 (680-106200-15), CV0005E-CS18 (680-106200-16) and CV0005E-CS24 (680-106200-17) were analyzed for Metals (ICP) in accordance with EPA SW-846 Method 6010C.

Several metals have recoveries outside criteria high for the MS of sample CV0005Y-CS6 (680-106200-1) in batch 680-354509.

Iron recovery is outside criteria low for the MSD of sample CV0005Y-CS6 (680-106200-1) in batch 680-354509. Aluminum, Arsenic and Lead recovery is outside criteria high.

Refer to the QC report for details.

Samples CV0005Y-CS6 (680-106200-1)[10X] and CV0005BB-CS12 (680-106200-11)[10X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

PERCENT SOLIDS/MOISTURE

Samples CV0005Y-CS6 (680-106200-1), CV0005Y-CSD6 (680-106200-2), CV0005Y-CS12 (680-106200-3), CV0005Y-CS18 (680-106200-4), CV0005Y-CS24 (680-106200-5), CV0005AA-CS6 (680-106200-6), CV0005AA-CS12 (680-106200-7), CV0005AA-CS18 (680-106200-8), CV0005AA-CS24 (680-106200-9), CV0005BB-CS6 (680-106200-10), CV0005BB-CS12 (680-106200-11), CV0005BB-CS18 (680-106200-12), CV0005BB-CS24 (680-106200-13), CV0005E-CS6 (680-106200-14), CV0005E-CS12

(680-106200-15), CV0005E-CS18 (680-106200-16) and CV0005E-CS24 (680-106200-17) were analyzed for Percent Solids/Moisture in accordance with TestAmerica SOP.

ATTACHMENT D

QUALIFIED SAMPLE RESULTS

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-106200-1

SDG No.: 680-106200-01

Client Sample ID: CV0005Y-CS6 | Lab Sample ID: 680-106200-1

Matrix: Solid | Lab File ID: 2YJ1511.D

Analysis Method: 8270D_LL_PAH | Date Collected: 10/09/2014 09:00

Extract. Method: 3546 | Date Extracted: 10/14/2014 10:14

Sample wt/vol: 30.12(g) | Date Analyzed: 10/15/2014 16:27

Con. Extract Vol.: 1(mL) | Dilution Factor: 20

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: 9.5 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 353689 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	150	U	150	73
208-96-8	Acenaphthylene	150	U	150	73
120-12-7	Anthracene	160		150	73
56-55-3	Benzo[a]anthracene	650	J	150	73
50-32-8	Benzo[a]pyrene	630		150	26
205-99-2	Benzo[b]fluoranthene	990	J	150	73
191-24-2	Benzo[g,h,i]perylene	430		150	73
207-08-9	Benzo[k]fluoranthene	430		150	44
218-01-9	Chrysene	860	J	150	73
53-70-3	Dibenz(a,h)anthracene	210		150	73
206-44-0	Fluoranthene	1200	J	150	73
86-73-7	Fluorene	150	U	150	73
193-39-5	Indeno[1,2,3-cd]pyrene	350		150	73
90-12-0	1-Methylnaphthalene	190		150	68
91-57-6	2-Methylnaphthalene	210		150	73
91-20-3	Naphthalene	140	J	150	73
85-01-8	Phenanthrene	810	J	150	53
129-00-0	Pyrene	1200	J	150	73

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-106200-1

SDG No.: 680-106200-01

Client Sample ID: CV0005Y-CSD6 | Lab Sample ID: 680-106200-2

Matrix: Solid | Lab File ID: 2YJ1512.D

Analysis Method: 8270D_LL_PAH | Date Collected: 10/09/2014 09:00

Extract. Method: 3546 | Date Extracted: 10/14/2014 10:14

Sample wt/vol: 30.07(g) | Date Analyzed: 10/15/2014 16:49

Con. Extract Vol.: 1(mL) | Dilution Factor: 20

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: 11.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 353689 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	150	U	150	74
208-96-8	Acenaphthylene	150	U	150	74
120-12-7	Anthracene	150	U	150	74
56-55-3	Benzo[a]anthracene	350	J	150	74
50-32-8	Benzo[a]pyrene	400		150	27
205-99-2	Benzo[b]fluoranthene	670	J	150	74
191-24-2	Benzo[g,h,i]perylene	290		150	74
207-08-9	Benzo[k]fluoranthene	260		150	45
218-01-9	Chrysene	520	J	150	74
53-70-3	Dibenz(a,h)anthracene	150		150	74
206-44-0	Fluoranthene	610	J	150	74
86-73-7	Fluorene	150	U	150	74
193-39-5	Indeno[1,2,3-cd]pyrene	240		150	74
90-12-0	1-Methylnaphthalene	230		150	70
91-57-6	2-Methylnaphthalene	240		150	74
91-20-3	Naphthalene	160		150	74
85-01-8	Phenanthrene	470	J	150	54
129-00-0	Pyrene	620	J	150	74

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-106200-1

SDG No.: 680-106200-01

Client Sample ID: CV0005Y-CS12 | Lab Sample ID: 680-106200-3

Matrix: Solid | Lab File ID: 2YJ1513.D

Analysis Method: 8270D_LL_PAH | Date Collected: 10/09/2014 09:10

Extract. Method: 3546 | Date Extracted: 10/14/2014 10:14

Sample wt/vol: 30.04(g) | Date Analyzed: 10/15/2014 17:12

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: 11.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 353689 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	76	U	76	37
208-96-8	Acenaphthylene	76	U	76	37
120-12-7	Anthracene	76	U	76	37
56-55-3	Benzo[a]anthracene	76	U	76	37
50-32-8	Benzo[a]pyrene	18	J	76	14
205-99-2	Benzo[b]fluoranthene	76	U	76	37
191-24-2	Benzo[g,h,i]perylene	76	U	76	37
207-08-9	Benzo[k]fluoranthene	76	U	76	23
218-01-9	Chrysene	76	U	76	37
53-70-3	Dibenz(a,h)anthracene	76	U	76	37
206-44-0	Fluoranthene	76	U	76	37
86-73-7	Fluorene	76	U	76	37
193-39-5	Indeno[1,2,3-cd]pyrene	76	U	76	37
90-12-0	1-Methylnaphthalene	76	U	76	35
91-57-6	2-Methylnaphthalene	76	U	76	37
91-20-3	Naphthalene	76	U	76	37
85-01-8	Phenanthrene	76	U	76	27
129-00-0	Pyrene	76	U	76	37

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-106200-1

SDG No.: 680-106200-01

Client Sample ID: CV0005Y-CS18 | Lab Sample ID: 680-106200-4

Matrix: Solid | Lab File ID: 2YJ1514.D

Analysis Method: 8270D_LL_PAH | Date Collected: 10/09/2014 09:20

Extract. Method: 3546 | Date Extracted: 10/14/2014 10:14

Sample wt/vol: 30.05(g) | Date Analyzed: 10/15/2014 17:34

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: 13.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 353689 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	77	U	77	38
208-96-8	Acenaphthylene	77	U	77	38
120-12-7	Anthracene	77	U	77	38
56-55-3	Benzo[a]anthracene	77	U	77	38
50-32-8	Benzo[a]pyrene	77	U	77	14
205-99-2	Benzo[b]fluoranthene	77	U	77	38
191-24-2	Benzo[g,h,i]perylene	77	U	77	38
207-08-9	Benzo[k]fluoranthene	77	U	77	23
218-01-9	Chrysene	77	U	77	38
53-70-3	Dibenz(a,h)anthracene	77	U	77	38
206-44-0	Fluoranthene	77	U	77	38
86-73-7	Fluorene	77	U	77	38
193-39-5	Indeno[1,2,3-cd]pyrene	77	U	77	38
90-12-0	1-Methylnaphthalene	77	U	77	36
91-57-6	2-Methylnaphthalene	77	U	77	38
91-20-3	Naphthalene	77	U	77	38
85-01-8	Phenanthrene	77	U	77	28
129-00-0	Pyrene	77	U	77	38

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-106200-1

SDG No.: 680-106200-01

Client Sample ID: CV0005Y-CS24 | Lab Sample ID: 680-106200-5

Matrix: Solid | Lab File ID: 2YJ1515.D

Analysis Method: 8270D_LL_PAH | Date Collected: 10/09/2014 09:30

Extract. Method: 3546 | Date Extracted: 10/14/2014 10:14

Sample wt/vol: 30.10(g) | Date Analyzed: 10/15/2014 17:56

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: 14.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 353689 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	78	U	78	39
208-96-8	Acenaphthylene	78	U	78	39
120-12-7	Anthracene	78	U	78	39
56-55-3	Benzo[a]anthracene	78	U	78	39
50-32-8	Benzo[a]pyrene	78	U	78	14
205-99-2	Benzo[b]fluoranthene	78	U	78	39
191-24-2	Benzo[g,h,i]perylene	78	U	78	39
207-08-9	Benzo[k]fluoranthene	78	U	78	23
218-01-9	Chrysene	78	U	78	39
53-70-3	Dibenz(a,h)anthracene	78	U	78	39
206-44-0	Fluoranthene	78	U	78	39
86-73-7	Fluorene	78	U	78	39
193-39-5	Indeno[1,2,3-cd]pyrene	78	U	78	39
90-12-0	1-Methylnaphthalene	78	U	78	36
91-57-6	2-Methylnaphthalene	78	U	78	39
91-20-3	Naphthalene	78	U	78	39
85-01-8	Phenanthrene	28	J	78	28
129-00-0	Pyrene	78	U	78	39

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-106200-1

SDG No.: 680-106200-01

Client Sample ID: CV0005AA-CS6 | Lab Sample ID: 680-106200-6

Matrix: Solid | Lab File ID: 2YJ1516.D

Analysis Method: 8270D_LL_PAH | Date Collected: 10/08/2014 14:00

Extract. Method: 3546 | Date Extracted: 10/14/2014 10:14

Sample wt/vol: 30.07(g) | Date Analyzed: 10/15/2014 18:18

Con. Extract Vol.: 1(mL) | Dilution Factor: 20

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: 9.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 353689 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	150	U	150	73
208-96-8	Acenaphthylene	150	U	150	73
120-12-7	Anthracene	150	U	150	73
56-55-3	Benzo[a]anthracene	360		150	73
50-32-8	Benzo[a]pyrene	440		150	26
205-99-2	Benzo[b]fluoranthene	630		150	73
191-24-2	Benzo[g,h,i]perylene	280		150	73
207-08-9	Benzo[k]fluoranthene	250		150	44
218-01-9	Chrysene	480		150	73
53-70-3	Dibenz(a,h)anthracene	110	J	150	73
206-44-0	Fluoranthene	560		150	73
86-73-7	Fluorene	150	U	150	73
193-39-5	Indeno[1,2,3-cd]pyrene	220		150	73
90-12-0	1-Methylnaphthalene	150	U	150	68
91-57-6	2-Methylnaphthalene	150	U	150	73
91-20-3	Naphthalene	150	U	150	73
85-01-8	Phenanthrene	240		150	53
129-00-0	Pyrene	630		150	73

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-106200-1

SDG No.: 680-106200-01

Client Sample ID: CV0005AA-CS12 | Lab Sample ID: 680-106200-7

Matrix: Solid | Lab File ID: 2YJ1517.D

Analysis Method: 8270D_LL_PAH | Date Collected: 10/08/2014 14:10

Extract. Method: 3546 | Date Extracted: 10/14/2014 10:14

Sample wt/vol: 30.05(g) | Date Analyzed: 10/15/2014 18:40

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: 9.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 353689 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	51	J	74	36
208-96-8	Acenaphthylene	74	U	74	36
120-12-7	Anthracene	110		74	36
56-55-3	Benzo[a]anthracene	400		74	36
50-32-8	Benzo[a]pyrene	360		74	13
205-99-2	Benzo[b]fluoranthene	510		74	36
191-24-2	Benzo[g,h,i]perylene	210		74	36
207-08-9	Benzo[k]fluoranthene	220		74	22
218-01-9	Chrysene	470		74	36
53-70-3	Dibenz(a,h)anthracene	41	J	74	36
206-44-0	Fluoranthene	930		74	36
86-73-7	Fluorene	42	J	74	36
193-39-5	Indeno[1,2,3-cd]pyrene	160		74	36
90-12-0	1-Methylnaphthalene	41	J	74	34
91-57-6	2-Methylnaphthalene	74	U	74	36
91-20-3	Naphthalene	74	U	74	36
85-01-8	Phenanthrene	560		74	26
129-00-0	Pyrene	730		74	36

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-106200-1

SDG No.: 680-106200-01

Client Sample ID: CV0005AA-CS18 | Lab Sample ID: 680-106200-8

Matrix: Solid | Lab File ID: 2YJ1518.D

Analysis Method: 8270D_LL_PAH | Date Collected: 10/08/2014 14:20

Extract. Method: 3546 | Date Extracted: 10/14/2014 10:14

Sample wt/vol: 30.12(g) | Date Analyzed: 10/15/2014 19:02

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: 11.3 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 353689 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	150		75	37
208-96-8	Acenaphthylene	75	U	75	37
120-12-7	Anthracene	310		75	37
56-55-3	Benzo[a]anthracene	700		75	37
50-32-8	Benzo[a]pyrene	530		75	13
205-99-2	Benzo[b]fluoranthene	690		75	37
191-24-2	Benzo[g,h,i]perylene	290		75	37
207-08-9	Benzo[k]fluoranthene	300		75	22
218-01-9	Chrysene	570		75	37
53-70-3	Dibenz(a,h)anthracene	85		75	37
206-44-0	Fluoranthene	1500		75	37
86-73-7	Fluorene	150		75	37
193-39-5	Indeno[1,2,3-cd]pyrene	240		75	37
90-12-0	1-Methylnaphthalene	40	J	75	35
91-57-6	2-Methylnaphthalene	41	J	75	37
91-20-3	Naphthalene	71	J	75	37
85-01-8	Phenanthrene	1400		75	27
129-00-0	Pyrene	1300		75	37

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-106200-1

SDG No.: 680-106200-01

Client Sample ID: CV0005AA-CS24 | Lab Sample ID: 680-106200-9

Matrix: Solid | Lab File ID: 2YJ1519.D

Analysis Method: 8270D_LL_PAH | Date Collected: 10/08/2014 14:30

Extract. Method: 3546 | Date Extracted: 10/14/2014 10:14

Sample wt/vol: 30.14(g) | Date Analyzed: 10/15/2014 19:24

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: 11.6 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 353689 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	75	U	75	37
208-96-8	Acenaphthylene	75	U	75	37
120-12-7	Anthracene	75	U	75	37
56-55-3	Benzo[a]anthracene	75	U	75	37
50-32-8	Benzo[a]pyrene	75	U	75	14
205-99-2	Benzo[b]fluoranthene	75	U	75	37
191-24-2	Benzo[g,h,i]perylene	75	U	75	37
207-08-9	Benzo[k]fluoranthene	75	U	75	23
218-01-9	Chrysene	75	U	75	37
53-70-3	Dibenz(a,h)anthracene	75	U	75	37
206-44-0	Fluoranthene	75	U	75	37
86-73-7	Fluorene	75	U	75	37
193-39-5	Indeno[1,2,3-cd]pyrene	75	U	75	37
90-12-0	1-Methylnaphthalene	75	U	75	35
91-57-6	2-Methylnaphthalene	75	U	75	37
91-20-3	Naphthalene	75	U	75	37
85-01-8	Phenanthrene	75	U	75	27
129-00-0	Pyrene	75	U	75	37

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-106200-1

SDG No.: 680-106200-01

Client Sample ID: CV0005BB-CS6 | Lab Sample ID: 680-106200-10

Matrix: Solid | Lab File ID: 2YJ1520.D

Analysis Method: 8270D_LL_PAH | Date Collected: 10/08/2014 12:30

Extract. Method: 3546 | Date Extracted: 10/14/2014 10:14

Sample wt/vol: 30.09(g) | Date Analyzed: 10/15/2014 19:47

Con. Extract Vol.: 1(mL) | Dilution Factor: 20

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: 12.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 353689 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	150	U	150	75
208-96-8	Acenaphthylene	100	J	150	75
120-12-7	Anthracene	90	J	150	75
56-55-3	Benzo[a]anthracene	550		150	75
50-32-8	Benzo[a]pyrene	650		150	27
205-99-2	Benzo[b]fluoranthene	920		150	75
191-24-2	Benzo[g,h,i]perylene	460		150	75
207-08-9	Benzo[k]fluoranthene	390		150	46
218-01-9	Chrysene	710		150	75
53-70-3	Dibenz(a,h)anthracene	96	J	150	75
206-44-0	Fluoranthene	1000		150	75
86-73-7	Fluorene	150	U	150	75
193-39-5	Indeno[1,2,3-cd]pyrene	350		150	75
90-12-0	1-Methylnaphthalene	88	J	150	71
91-57-6	2-Methylnaphthalene	100	J	150	75
91-20-3	Naphthalene	97	J	150	75
85-01-8	Phenanthrene	460		150	55
129-00-0	Pyrene	960		150	75

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-106200-1

SDG No.: 680-106200-01

Client Sample ID: CV0005BB-CS12 | Lab Sample ID: 680-106200-11

Matrix: Solid | Lab File ID: 2YJ1521.D

Analysis Method: 8270D_LL_PAH | Date Collected: 10/08/2014 12:40

Extract. Method: 3546 | Date Extracted: 10/14/2014 10:14

Sample wt/vol: 30.16(g) | Date Analyzed: 10/15/2014 20:09

Con. Extract Vol.: 1(mL) | Dilution Factor: 20

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: 14.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 353689 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	160	U	160	76
208-96-8	Acenaphthylene	160	U	160	76
120-12-7	Anthracene	160	U	160	76
56-55-3	Benzo[a]anthracene	230		160	76
50-32-8	Benzo[a]pyrene	230		160	28
205-99-2	Benzo[b]fluoranthene	330		160	76
191-24-2	Benzo[g,h,i]perylene	150	J	160	76
207-08-9	Benzo[k]fluoranthene	130	J	160	46
218-01-9	Chrysene	270		160	76
53-70-3	Dibenz(a,h)anthracene	160	U	160	76
206-44-0	Fluoranthene	480		160	76
86-73-7	Fluorene	160	U	160	76
193-39-5	Indeno[1,2,3-cd]pyrene	130	J	160	76
90-12-0	1-Methylnaphthalene	160	U	160	72
91-57-6	2-Methylnaphthalene	160	U	160	76
91-20-3	Naphthalene	160	U	160	76
85-01-8	Phenanthrene	290		160	56
129-00-0	Pyrene	470		160	76

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-106200-1

SDG No.: 680-106200-01

Client Sample ID: CV0005BB-CS18 | Lab Sample ID: 680-106200-12

Matrix: Solid | Lab File ID: 2YJ1522.D

Analysis Method: 8270D_LL_PAH | Date Collected: 10/08/2014 12:50

Extract. Method: 3546 | Date Extracted: 10/14/2014 10:14

Sample wt/vol: 30.08(g) | Date Analyzed: 10/15/2014 20:31

Con. Extract Vol.: 1(mL) | Dilution Factor: 10

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: 13.1 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 353689 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	77	U	77	38
208-96-8	Acenaphthylene	77	U	77	38
120-12-7	Anthracene	77	U	77	38
56-55-3	Benzo[a]anthracene	75	J	77	38
50-32-8	Benzo[a]pyrene	86		77	14
205-99-2	Benzo[b]fluoranthene	120		77	38
191-24-2	Benzo[g,h,i]perylene	75	J	77	38
207-08-9	Benzo[k]fluoranthene	50	J	77	23
218-01-9	Chrysene	110		77	38
53-70-3	Dibenz(a,h)anthracene	77	U	77	38
206-44-0	Fluoranthene	120		77	38
86-73-7	Fluorene	77	U	77	38
193-39-5	Indeno[1,2,3-cd]pyrene	49	J	77	38
90-12-0	1-Methylnaphthalene	77	U	77	36
91-57-6	2-Methylnaphthalene	77	U	77	38
91-20-3	Naphthalene	77	U	77	38
85-01-8	Phenanthrene	58	J	77	28
129-00-0	Pyrene	120		77	38

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-106200-1

SDG No.: 680-106200-01

Client Sample ID: CV0005BB-CS24 | Lab Sample ID: 680-106200-13

Matrix: Solid | Lab File ID: 2YJ1523.D

Analysis Method: 8270D_LL_PAH | Date Collected: 10/08/2014 13:00

Extract. Method: 3546 | Date Extracted: 10/14/2014 10:14

Sample wt/vol: 30.11(g) | Date Analyzed: 10/15/2014 20:53

Con. Extract Vol.: 1(mL) | Dilution Factor: 20

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: 10.9 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 353689 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	150	U	150	74
208-96-8	Acenaphthylene	150	U	150	74
120-12-7	Anthracene	83	J	150	74
56-55-3	Benzo[a]anthracene	320		150	74
50-32-8	Benzo[a]pyrene	320		150	27
205-99-2	Benzo[b]fluoranthene	430		150	74
191-24-2	Benzo[g,h,i]perylene	210		150	74
207-08-9	Benzo[k]fluoranthene	210		150	45
218-01-9	Chrysene	390		150	74
53-70-3	Dibenz(a,h)anthracene	94	J	150	74
206-44-0	Fluoranthene	590		150	74
86-73-7	Fluorene	150	U	150	74
193-39-5	Indeno[1,2,3-cd]pyrene	150		150	74
90-12-0	1-Methylnaphthalene	150	U	150	69
91-57-6	2-Methylnaphthalene	150	U	150	74
91-20-3	Naphthalene	150	U	150	74
85-01-8	Phenanthrene	370		150	54
129-00-0	Pyrene	570		150	74

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-106200-1

SDG No.: 680-106200-01

Client Sample ID: CV0005E-CS6 | Lab Sample ID: 680-106200-14

Matrix: Solid | Lab File ID: 2YJ1524.D

Analysis Method: 8270D_LL_PAH | Date Collected: 10/08/2014 09:20

Extract. Method: 3546 | Date Extracted: 10/14/2014 10:14

Sample wt/vol: 30.23(g) | Date Analyzed: 10/15/2014 21:15

Con. Extract Vol.: 1(mL) | Dilution Factor: 20

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: 8.2 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 353689 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	140	U	140	71
208-96-8	Acenaphthylene	460		140	71
120-12-7	Anthracene	240		140	71
56-55-3	Benzo[a]anthracene	3100		140	71
50-32-8	Benzo[a]pyrene	3100		140	26
205-99-2	Benzo[b]fluoranthene	4800		140	71
191-24-2	Benzo[g,h,i]perylene	2000		140	71
207-08-9	Benzo[k]fluoranthene	1900		140	43
218-01-9	Chrysene	3500		140	71
53-70-3	Dibenz(a,h)anthracene	740		140	71
206-44-0	Fluoranthene	6000		140	71
86-73-7	Fluorene	84	J	140	71
193-39-5	Indeno[1,2,3-cd]pyrene	1400		140	71
90-12-0	1-Methylnaphthalene	94	J	140	67
91-57-6	2-Methylnaphthalene	110	J	140	71
91-20-3	Naphthalene	110	J	140	71
85-01-8	Phenanthrene	930		140	52
129-00-0	Pyrene	6300		140	71

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-106200-1

SDG No.: 680-106200-01

Client Sample ID: CV0005E-CS12 | Lab Sample ID: 680-106200-15

Matrix: Solid | Lab File ID: 2YJ1525.D

Analysis Method: 8270D_LL_PAH | Date Collected: 10/08/2014 09:30

Extract. Method: 3546 | Date Extracted: 10/14/2014 10:14

Sample wt/vol: 30.06(g) | Date Analyzed: 10/15/2014 21:38

Con. Extract Vol.: 1(mL) | Dilution Factor: 20

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: 10.0 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 353689 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	150	U	150	73
208-96-8	Acenaphthylene	580		150	73
120-12-7	Anthracene	240		150	73
56-55-3	Benzo[a]anthracene	2100		150	73
50-32-8	Benzo[a]pyrene	2800		150	27
205-99-2	Benzo[b]fluoranthene	3800		150	73
191-24-2	Benzo[g,h,i]perylene	1900		150	73
207-08-9	Benzo[k]fluoranthene	1400		150	44
218-01-9	Chrysene	2600		150	73
53-70-3	Dibenz(a,h)anthracene	680		150	73
206-44-0	Fluoranthene	3000		150	73
86-73-7	Fluorene	87	J	150	73
193-39-5	Indeno[1,2,3-cd]pyrene	1500		150	73
90-12-0	1-Methylnaphthalene	74	J	150	69
91-57-6	2-Methylnaphthalene	85	J	150	73
91-20-3	Naphthalene	100	J	150	73
85-01-8	Phenanthrene	750		150	53
129-00-0	Pyrene	3600		150	73

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-106200-1

SDG No.: 680-106200-01

Client Sample ID: CV0005E-CS18 | Lab Sample ID: 680-106200-16

Matrix: Solid | Lab File ID: 1YJ1605.D

Analysis Method: 8270D_LL_PAH | Date Collected: 10/08/2014 09:40

Extract. Method: 3546 | Date Extracted: 10/14/2014 10:14

Sample wt/vol: 30.04(g) | Date Analyzed: 10/16/2014 10:46

Con. Extract Vol.: 1(mL) | Dilution Factor: 50

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: 9.8 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 353862 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	370	U	370	180
208-96-8	Acenaphthylene	1200		370	180
120-12-7	Anthracene	650		370	180
56-55-3	Benzo[a]anthracene	7200		370	180
50-32-8	Benzo[a]pyrene	6800		370	66
205-99-2	Benzo[b]fluoranthene	10000		370	180
191-24-2	Benzo[g,h,i]perylene	4600		370	180
207-08-9	Benzo[k]fluoranthene	3400		370	110
218-01-9	Chrysene	7400		370	180
53-70-3	Dibenz(a,h)anthracene	1600		370	180
206-44-0	Fluoranthene	11000		370	180
86-73-7	Fluorene	220	J	370	180
193-39-5	Indeno[1,2,3-cd]pyrene	4000		370	180
90-12-0	1-Methylnaphthalene	370	U	370	170
91-57-6	2-Methylnaphthalene	370	U	370	180
91-20-3	Naphthalene	230	J	370	180
85-01-8	Phenanthrene	2700		370	130
129-00-0	Pyrene	13000		370	180

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: TestAmerica Savannah | Job No.: 680-106200-1

SDG No.: 680-106200-01

Client Sample ID: CV0005E-CS24 | Lab Sample ID: 680-106200-17

Matrix: Solid | Lab File ID: 2YJ1527.D

Analysis Method: 8270D_LL_PAH | Date Collected: 10/08/2014 09:50

Extract. Method: 3546 | Date Extracted: 10/14/2014 10:14

Sample wt/vol: 30.01(g) | Date Analyzed: 10/15/2014 22:22

Con. Extract Vol.: 1(mL) | Dilution Factor: 20

Injection Volume: 2(uL) | Level: (low/med) Low

% Moisture: 8.4 | GPC Cleanup:(Y/N) N

Analysis Batch No.: 353689 | Units: ug/Kg

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
83-32-9	Acenaphthene	240		150	72
208-96-8	Acenaphthylene	1100		150	72
120-12-7	Anthracene	900		150	72
56-55-3	Benzo[a]anthracene	5200		150	72
50-32-8	Benzo[a]pyrene	5600		150	26
205-99-2	Benzo[b]fluoranthene	7900		150	72
191-24-2	Benzo[g,h,i]perylene	3400		150	72
207-08-9	Benzo[k]fluoranthene	3500		150	44
218-01-9	Chrysene	5800		150	72
53-70-3	Dibenz(a,h)anthracene	1600		150	72
206-44-0	Fluoranthene	7800		150	72
86-73-7	Fluorene	300		150	72
193-39-5	Indeno[1,2,3-cd]pyrene	2600		150	72
90-12-0	1-Methylnaphthalene	190		150	68
91-57-6	2-Methylnaphthalene	220		150	72
91-20-3	Naphthalene	390		150	72
85-01-8	Phenanthrene	2900		150	52
129-00-0	Pyrene	9200		150	72

CAS NO.	SURROGATE	%REC	Q	LIMITS
84-15-1	o-Terphenyl	0	D	36-131